50244



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Werner PFEIFFER

**PATENT** 

Serial No.: 10/563,954

Art Unit: 1797

Filed:

January 10, 2006

Examiner: R. J. Popovics

For:

METHOD FOR FILTERING FLUIDS

AND DEVICE FOR IMPLEMENTING:

SAID METHOD

Appeal No. \_\_\_\_\_

# **BRIEF ON APPEAL**

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# APPELLANT BRIEF ON APPEAL UNDER 37 C.F.R. §41.37

COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

For the appeal to the Board of Patent Appeals and Interferences from the decision dated May 10, 2010 of the Primary Examiner twice and finally rejecting claims 8-21 in connection with the above-identified application, Applicant–Appellant submits the following brief in accordance with 37 CFR §41.37.

#### 1. Real Party in Interest

The inventor, Werner Pfeiffer, assigned his entire right, title and interest in the patent application to E. Begerow GmbH & Co. of Langenlonsheim, Germany.

10/08/2010 AWONDAF1 00000074 10563954 01 FC:1402

#### 2. Related Appeals and Interferences

There are no other related appeals or interferences known to Appellant, Appellant's legal representative, or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

#### 3. Status of Claims

Claims 1-7 are cancelled. Claims 8-21 are pending, are rejected, and are on appeal.

#### 4. Status of Amendments

Subsequent to the February 10, 2009 Office Action containing the final rejection, no amendment was filed. A Petition filed August 10, 2010 and seeking entry of two amendments to the specification and drawings alleged to introduce "new matter" was granted in a September 22, 2010 Decision on Petition. Thus, all amendments to the specification and drawings should now be entered and have been held to be adequately supported in the originally filed application.

#### 5. Summary of the Invention

Independent claim 8 covers a method of filtering fluids comprising supplying unfiltered material through an input 22 to a plurality of stacked frame parts 16 and discharging filtrate through an output 24 (Fig. 1; p. 7, lines 5-17). The frame parts 16 are filtrate plates 26 and filter frames 28 arranged in sets with the filter frames 28 bordering on filter spaces 30 (Figs. 2, 2a and 2b; p. 7, lines 18-20). Filtrate cakes are formed in the filter spaces 30 (Figs. 2, 2a and 2b; p. 7, lines 18-20). Each filter space 30 is sealed on its side facing the next filter frame part 16 by a first laminar filter 32 and on its opposite side by a second filter medium 34 (Figs. 2, 2a and 2b; p. 7, lines 20-24). A washing

fluid w is fed sequentially through each set of the filter mediums 34, the filter cakes and the laminar filters 32 in that order such that in each set the washing fluid w flows through one second filter medium 34, then through one filter cake and then through one first laminar filter 32. The washing fluid w is then conveyed from the laminar filters 32 to the output 22 (Figs. 1, 2, 2a and 2b; p. 8, line 23 – p. 9, line 16).

Independent claim 14 covers a device for filtering fluids comprising an input 22 for supplying unfiltered material, an output 24 for discharging filtrate and a plurality of stackable frame parts 16 including filtrate plates 26 and filter frames 28 arranged in sets thereof between the input 22 and output 24 (Figs. 1, 2, 2a, 2b; p. 7, lines 5-20). Each filter frame 28 borders on a filtrate space 30 for accommodating and forming a filter cake (Figs. 2, 2a, 2b; p. 7, lines 18-20). First laminar filters 32 are mounted on the respective frame parts 16, face others of the frame parts 16 and seal the filtrate spaces 30 (Figs. 2, 2a, 2b; p. 7, lines 20-24). Second filter mediums 34 border the filtrate spaces 30 on its sides opposite the first laminar filters 32 (Figs. 2, 2a, 2b; p. 7, lines 20-24). Channel means (channels 38, 40) conveys a washing fluid w sequentially through each set of the second filter medium 34, the filtrate spaces 30 and the first laminar filters 32 in that order, and then out the output such that in each set the washing fluid w flows first through one second filter medium 34, then through one filter cake and then through one first laminar filter 32 before flowing to the output 22 (Figs. 2, 2a, 2b; p. 8, line 23 – p. 9, line 16).

By forming the method and forming the device in these manners, the washing fluid w can be used in a subsequent filtration process. Specifically, the washing fluid w, relative to each filtrate space or set first passes through the respective filter medium 34, then through the filter cake in that filter space 30, and then through the respective laminar filter 32 in that order before being conveyed from the laminar filter to the output 22. This washing fluid procedure provides an additional filter

mechanism for removing by back washing valuable substances entrapped within the filter cake in a filtered manner, since the back washing fluid w must pass through the first laminar filter before passing to the output.

The compression means of claim 16 is pressing means 20 (Fig. 1; p. 7, lines 9-11).

# 6. Grounds of Rejection to be Reviewed on Appeal

Claims 8-21 stand rejected under 35 U.S.C. §112 as failing to comply with the enablement requirement.

#### 7. Arguments

# A. Rejection Under 35 U.S.C. §112, First Paragraph

Claims 8-21 stand rejected under 35 U.S.C. §112, first paragraph, as being based on an insufficient disclosure allegedly since the originally filed disclosure allegedly remains a "mystery".

#### B. Disclosure is Adequate

The rejection appears to be solely based on the Examiner's improper general questioning of the cross-sectional views and of the operation of the method and device, without specifying the alleged deficiencies. Since the cross-sectional views have now been held to be proper and the application's disclosure of the operation of the claimed method and device would enable one skilled in the pertinent art to make and use the claimed method and device, the rejection is untenable.

The questioning of the cross sections that has been answered in the Decision on Petition, and thus, need not be addressed in this Brief.

The only other portion questioned is how pressurized fluid is delivered to or drained from pressure spaces 50 via pressure channels 52. Regarding delivery and draining of pressurized fluid into spaces 50 via pressure channels 52, the pressure spaces 50 and the pressure channels 52 are connected in the same manner as the other channels to their respective spaces. Such connection is shown, for example, in Fig. 3 by the connection of channel 36 to space 30. Since such connection would be readily apparent to one skilled in the pertinent art based on the original disclosure (including the entire specification and drawings), the disclosure of the pressure spaces 50 and the channels 52 is adequate to enable one skilled in the art to make and use the invention. This operation is further clarified by the amendments to the specification and claims approved in the September 22, 2010 Decision on Petition.

Specifically, one skilled in this art would readily recognize that pressure spaces 50 are connected to pressure channels 50 by connecting passages as shown, for example, in Fig. 4a. These connecting passages structurally correspond to those connecting passages provided for input channels 36 and output channels 38, 40 to connect channels 36, 38, 40 to spaces 30. Since the connections to spaces 30 are admittedly adequately disclosed, the connections of spaces 50 to channels 52 are also adequately disclosed to enable one skilled in the art to make and use the claimed invention.

The newly accepted drawings add arrows "f" and "w" to show the filtering flow and the washing flow, respectively, as clearly described in the paragraph spanning pages 8-9 of the substitute specification and on page 9 of the originally filed specification. The additions of these arrows are fully supported by the present application, particularly as the original application would be interpreted in this manner by one skilled in this art.

The arrows show, as disclosed on those pages of the originally filed and substitute specifications, that the unfiltered material is supplied via input channels 36 to the individual frame parts 16 in the stack sequence. The respective unfiltered material flows through the input channels 36 into the filtrate space 30. Fluid then passes through the laminar filter 32 and the laminar filter 34 on both sides. The filtrate is then drained via output channels 38, 40 which are mounted in succession in the horizontal plane. The other output channel 40 shown in FIG. 2b is in another section plane from output channel 38 in FIG. 2. As shown in FIG. 2a, the configuration of output channels 38, 40 is doubled, specifically extending at the top and bottom on the frame parts 16 and extending essentially in a horizontal plane to the input channels 36 for the unfiltered material. If at this point the filter cake has built up sufficiently in the respective filtrate space 30, it still has corresponding contents which have not been filtered out. In order to recover these substances, the filter cake in the filtrate space 30 is washed out. For this purpose, a washing fluid or liquid w is supplied on the input side via the filter output channel 38. After passing through the filtrate plates 26, the filter medium 34, the filtrate cake in the filtrate space 30 and the laminar filter 32, the washing fluid or liquid w with the active substances obtained by washing travels into the filtrate plate part 26, which is the middle one as viewed in FIG. 2, and from there drains via output channel 40.

The newly accepted drawings also add arrowheads for the lead lines for "16" to indicate more clearly that frame parts comprise sets of filtrate plates 26 and filter frames 18 for the embodiments of FIGS. 2, 2a and 2b, or comprise sets of filtrate plates 26, filter frames 28 and membrane plates 44 for the embodiments for FIGS. 3.3a, 4 and 4a.

An application satisfies the enablement requirement of 35 U.S.C. §112, first paragraph, by showing only the improvements over the prior art and without providing details known in the

prior art. <u>CFMT, Inc. v. Yieldup Int'l Corp.</u>, 349 F.3d 1333, 1338, 68 USPQ 2d 1940, 1944 (Fed. Cir. 2003). The applicant's improvements over the prior art filtering method and devices are adequately disclosed. This application does not present blank box, but has adequately detailed drawings and an adequately detailed description as outlined above.

The Examiner bears the initial burden of establishing a reasonable basis to question the enablement provided for the claimed invention. An application that includes a teaching of making and using the invention in terms corresponding to those used in the claims must be taken as in compliance with the enablement requirement of the first paragraph of §112 "unless there is reason to doubt the objective truth of the statements contained therein which must be relied upon for enabling support." It is incumbent on the Examiner to explain in detail supported by acceptable evidence or reasoning to overcome a presumptively accurate disclosure. In re Marzocchi, 439 F.2d 220, 223-4, 169 USPQ 367, 369-70 (C.C.P.A. 1971). As stated in MPEP 2164.04,

"the examiner should specifically identify what information is missing and why one skilled in the art could not supply the information without undue experimentation...specific technical reasons are always required."

Here, the required "specific technical reasons" are not provided to support the rejection. Only vague and general assertions are presented in the final rejection that are inadequate to support this §112 rejection.

Thus, the specification, drawings and claims 8-21 comply with all requirements of 35 U.S.C. §112 and are allowable.

# 8. Conclusion

In view of the foregoing, the rejections of claims 11-30 are untenable and reversal thereof is requested.

Respectfully submitted,

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Dated: October \_7, 2010

#### APPENDIX A – COPY OF CLAIMS ON APPEAL

8. A method of filtering fluids, comprising the steps of:

supplying unfiltered material through an input to a plurality of stacked frame parts of filtrate plates and filter frames arranged in sets thereof, the filter frames bordering on filter spaces;

discharging filtrate through an output;

forming filtrate cakes in the filter spaces;

sealing each filter space on a side thereof facing a next frame part by a first laminar filter and on an opposite side thereof by a second filter medium;

feeding a washing fluid sequentially through each set of the second filter mediums, the filter cakes and the laminar filters in that order such that in each set the washing fluid flows first through one second filter medium, then through one filter cake and then through one first laminar filter; and conveying the washing fluid from the laminar filters to the output.

- 9. A method according to claim 8 wherein
- the laminar filters are deep-bed filter mediums; and

the second filter mediums are formed by one of filter cloths and deep-bed filter mediums.

10. A method according to claim 8 wherein

a compressive force is applied to each second filter medium, pressing the respective filter cake in a direction of the respective first laminar filter.

### 11. A method according to claim 10 wherein

each compressive force is applied to the respective second filter medium by a membrane subjected to a pressurized medium in the form of one of a pressurized gas and a pressurized liquid, each membrane being a component of a membrane plate formed as another frame part.

## 12. A method according to claim 8 wherein

each first laminar filter and second filter medium are clamped between the respective frame parts formed as plates; and

the unfiltered material and the filtrate is conveyed through channels in the plates to and from the input and output.

#### 13. A method according to claim 12 wherein

the washing fluid is supplied and drained through channels in the frame parts.

### 14. A device for filtering fluids, comprising:

an input for supplying unfiltered material;

an output for discharging filtrate;

a plurality of stackable frame parts including filtrate plates and filter frames between said input and said output arranged in sets thereof, each said filter frame bordering on a filtrate space for accommodating and forming a filter cake;

first laminar filters being mounted on the respective frame parts, facing others of said frame parts and sealing said filtrate spaces;

second filter mediums bordering said filtrate spaces on sides thereof opposite said first laminar filters; and

channel means for conveying a washing fluid sequentially through each set of said second filter mediums, said filtrate spaces and said first laminar filters in that order, and out said output, such that in each set the washing fluid flows first through one filter medium, then through one filter cake and then through one first laminar filter before flowing to said output.

## 15. A device according to claim 14 wherein

said first laminar filters are deep-bed filter mediums; and

said second filter mediums are one of filter cloths and deep-bed filter mediums.

# 16. A device according to claim 14 wherein

said frame parts comprise compression means for applying compressive forces to each said filtrate space from the respective second filter medium toward the respective first laminar filter.

# 17. A device according to claim 14 wherein

said compression means comprise membrane plates being selected ones of said frame parts and having membranes exposed to pressurized medium in the form of one of pressurized gas and pressurized liquid.

# 18. A device according to claim 14 wherein

said first laminar filters and said second filter mediums are clamped between respective frame parts formed as plates; and

channels extend through said plates for conveying unfiltered material and filtrate through said parts and to form said input and said output.

19. A device according to claim 14 wherein said channel means comprise channels extending through said frame parts.

A method according to claim 8 wherein

20.

- the unfiltered material is a blood plasma fluid for blood-plasma fractionation with filtration of fine particles.
  - 21. A method according to claim 20 wherein the fine particles are selected from the group consisting of albumin, globulin and proteins.

# **APPENDIX B - EVIDENCE**

None

# APPENDIX C – RELATED PROCEEDINGS



None